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# REPORTS BY DIVISIONS AND GOVERNMENTS ON THE SITUATION IN THEIR REGIONS AND COUNTRIES AND ON THE PROGRESS MADE IN THE STANDARDIZATION OF GEOGRAPHICAL NAMES SINCE THE SIXTH CONFERENCE

Canadian Permanent Committee on Geographical Names/
Comité Permanent Canadien des noms Géographiques

Paper submitted by Canada**

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** Prepared by Helen Kerfoot, Executive Secretary, Canadian Permanent Committee on Geographical Names.

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In 1997 we are celebrating the Centennial year of the establishment of a national geographical names authority for Canada. The very first board (the Geographic Board of Canada) was set up to standardize the spelling and applications of geographical names, to maintain a register of this information, and to advise federal departments on the use of these names. From this early federal board has developed the federal / provincial / territorial names committee of today - the Canadian Permanent Committee on Geographical Names (CPCGN).

Over the past century, changes have taken place in the way geographical names are managed, but the CPCGN of today continues to be responsible for developing policies, principles and procedures relevant to the cartographic and linguistic treatment of geographical names and associated terminology. The CPCGN is the umbrella organization coordinating all matters affecting geographical nomenclature in Canada, with decisions on new names and name changes being made through the jurisdictions of CPCGN members.

Membership on the Committee is set down in the Order in Council (the latest version being P.C. 1990-549 of 22 March 1990). In 1997, there are 25 members, representing ten provinces; two territories; various federal departments involved with mapping, defence, archives, translation, Canada Lands, and statistics; and academics chairing CPCGN advisory committees. During the coming year, it is planned to invite Canada Post Corporation to become a member of the CPCGN. By April 1999, the new territory of Nunavut will come into being, and will have representation on the Committee.

## 1. CPCGN meetings and advisory committees

Since 1992, the CPCGN has met annually - in Newfoundland, Ontario, British Columbia, Quebec, and Yukon Territory.

The 1997 meeting was held in Ottawa, the national capital, in association with special events to celebrate the Centennial. To publicize the work of the Committee to the general public we organized two events. The federal government departments of Parks Canada and the National Archives of Canada led the production of an exhibit, *Every Name Tells a Story: 100 Years of Official Naming in Canada. / À chaque nom son histoire : 100 ans d'appellations officielles de noms de lieux au Canada*, to be open for several months, without admission charge, to the public. The second event was an illustrated bilingual lecture *Geographical Names of Canada: Historical Treasure Chest / La toponymie canadienne, un coffre au trésor historique*, presented by Henri Dorion and co-sponsored by The Royal Canadian Geographical Society and the CPCGN.

Four advisory committees of the CPCGN have been active during the past five years, providing advice on toponymy research, nomenclature and delineation, names of undersea and maritime features, and digital toponymic services. In addition, a working group developed specifications for a concise gazetteer of Canada (published in 1997), and another orchestrated activities for the Centennial year.

Since 1992, the CPCGN has been chaired by Mr. E.A. Price, from the private sector.

## 2. Strategic plan, mission and goals

Increased pressure on government resources has led to more emphasis on business-like approaches to government work. To address these needs, the CPCGN developed its first strategic plan in 1989. Since then, this document, which provides a framework for the work of the CPCGN, has been through two revisions (1993 and 1997). It provides a handbook for CPCGN members, and in its appendices includes the current Order in Council, the mandates of the advisory committees, and contact points for members.

In the 1993 and 1997 editions, the core activity areas of the CPCGN are shown as:

- collection of geographical names
- automation of geographical names records and assurance of availability of information in automated systems
- development of national toponymic policies, principles, standards and guidelines
- provision of appropriate methodology, tools and training to support CPCGN toponymic programmes
- dissemination of accurate toponymic information
- outreach and liaison with the international community

## 3. National programmes

In keeping with these goals, various activities have been undertaken since 1992.

### 3.1 Field recording of geographical names

Field work is now an activity organized at the provincial or territorial, rather than federal, level. Gathering of local geographical names is sometimes community based, and may be done by government or through the private sector. Field work, as undertaken in the 1960s and 1970s in Canada, is now an even more expensive proposition, and most governments are cutting back on extensive field programmes. Particular in southern Canada, data gathering is limited to small areas, or to investigation of public proposals for new names or name changes. In areas of northern Canada, fairly extensive field collection is still being completed, in particular to record names in oral tradition used by Aboriginal peoples.

Since 1990, some large areas in the Northwest Territories, and lesser areas in Yukon Territory, Quebec, Newfoundland, and Alberta have been systematically surveyed for names. These jurisdictions, plus Nova Scotia, New Brunswick, Ontario, Manitoba, and British Columbia, have in some areas undertaken field collection on a rather less comprehensive basis, or are aware of independent studies that have addressed field recording of toponyms.

In some areas, but a few names have been added to the official records; in others, several thousand names may have been recorded, but have not necessarily yet been through the necessary administrative steps to designate them as official toponyms.

To record this information on field work, the CPCGN has been maintaining base maps of Canada, on which are compiled 1:50 000 scale map sheet areas where field work has been undertaken. This has evolved into a data base, from which can be plotted field work undertaken in particular decades (or more recently in individual years). Some parts of Canada still have a low density of locally recorded names, but considerable progress has been made in the 1990s to record and document names in oral tradition in the north, before many are lost with the passing of today's elders.

### 3.2 Automation of toponymic data bases and data availability

This aspect of CPCGN standardization activities has increased in importance over the past five years. The CPCGN Advisory Committee on Canadian Digital Toponymic Services followed up its Vision and associated recommendations to the CPCGN by providing a forum for members to discuss the development of toponymic data bases, the exchange of digital toponymic data between different levels of government, and links to other types of geo-referenced data bases.

The Canadian Geographical Names Data Base (CGNDB) is managed nationally at Natural Resources Canada, and contains some 500 000 records from across the country, with attribute information about location, status, type of feature, date of official recognition, name origin, etc. The CGNDB is managed with ORACLE software (Version 7), running on a SPARC 10, with a SOLARIS 2.4 operating system. The character set ISO 8859 allows the inclusion of diacritics needed in Canadian names, except for some characters used in Athapaskan languages. At present, numerical substitutions are used to represent these characters.

Today, name decisions are made at the level of individual jurisdictions of the CPCGN, so most provinces and territories have some sort of data base storing their names records in a digital format. Some of these originated from downloaded files from the CGNDB (e.g. Northwest Territories, British Columbia) while others grew from the provincial paper copy names records (e.g. Quebec, Alberta). During the 1990s, agreements were signed with provinces and territories to ensure the continued free exchange of toponymic data, including the "core" fields of information associated with each approved record.
Core data fields are as follows:

- Geographical name - spelled as authorized
- Province / territory in which the feature lies
- Status - at a minimum, whether or currently approved / official
- Cross-reference to formerly approved name, if name is being changed
- Date on which name was approved (or ceased to be approved for current use)
- Type of feature / place
- Latitude and longitude - including degrees, minutes, and seconds in new records; also coordinates for headwaters of flowing features
- National Topographic System (NTS) 1:50 000 map reference
- At least one element of administrative or geographic locational data
- Brief narrative of location
- Graphic representation to show applicable limits of feature

Also highly desirable are:

- Second level of administrative unit within the province or territory (where applicable)
- Unofficial variant names
- Summary of origin or historical data

Other fields of data are kept at the provincial/territorial level (e.g. details on field collection and on administrative steps relevant to the approval of a name); and other fields are added nationally (e.g. code for features in a national park, flags for features crossing territorial/provincial/international borders). Every record on the CGNDB is identified by a five letter unique key. These may, or may not, be included at the provincial/territorial level data bases.

Toponymic data is today transferred in a variety of ways, ranging from the traditional paper copy method to ftp data capture over the Internet.

Since the mid-1990s, names in a separate data base, maintained by the Canadian Hydrographic Service for the CPCGN, have also been amalgamated into the Canadian Geographical Names Data Base.

So that CPCGN members could have on-line read-only access to the records of the CGNDB, accounts were set up to enable telnet sessions from remote locations to the central data base. Members' access permitted a more comprehensive view of the data than is provided to the general public.

Several initiatives to upgrade data have been undertaken over the last five years. Nationwide, a continuing programme to correct errors in records is in hand. The coordinates are upgraded to degrees, minutes and seconds, wherever possible, but only in Manitoba has a project been completed to upgrade all records in this way. During the past three years, a major project has been undertaken to add all pertinent NTS 1:50 000 map sheet numbers to records, to improve on the record of a single map sheet, as previously stored.

A project with Statistics Canada has been completed to match the place names in 1991 Census data with the official spellings stored on the CGNDB. This will allow Statistics Canada access to name changes, and means that population data (at least for incorporated places) could be accessed for name records on the CGNDB. These links will promote the use of official names.

Accuracy of data and maintenance of standardized name records remains an essential function of the CPCGN, particularly as the use of official toponyms and their digital distribution increases annually.

### 3.3 Development of policies and standards

Since the publication of the revised edition of *Principles and procedures for geographical naming* in 1990, only a few changes have been made to the concepts included.

- In Principle 7, the text on discriminatory or derogatory names has been restated.
- In Appendix 4, the two-letter code for Quebec has been updated from PQ to QC

The glossary of *Generic terms in Canada's geographical names* was originally published in 1987. No new edition has been published, but a reference list of generic terms in use continues to be maintained, and approximately 30 further terms have been identified and described in their use in current official toponyms.

The role of the CPCGN's Advisory Committee on Names for Undersea and Maritime Features has started to expand as recent technology allows improved identification of details of the sea floor. The information pamphlet on the role of this Committee is currently being reviewed.

The federal Translation Bureau continues to address questions associated with the use of geographical names in English- and French-language texts. There continue to be a number of places and features that have official names in both English and French, including pan-Canadian feature names, some undersea features names, names of national parks, etc. (The complete listing is available from the CPCGN Secretariat.)

In Manitoba, equivalent names have been approved in French for a number of water courses, crossing designated French Language Service Areas in the southern part of the province. These names are for use on maps and in texts. In Ontario, alternate names

(exact status/use yet to be determined) have been approved and unofficial French text equivalents have been established for all Ontario's official geographical names. In the Yukon, some alternate names (exact status/use yet to be determined) have been approved in Aboriginal languages for geographical features already having official names, mainly in English.

CPCGN awareness of Aboriginal names and naming continues. Extensive recording of names in oral tradition is taking place, particularly in northern parts of Canada. Writing of names in these languages is following standard orthographies, wherever they exist. In Athapaskan languages, where the modified, extended Roman alphabet is used, such characters may be included in geographical names. A registry is maintained for these characters (currently 25 are in use) needed on the Canadian Geographical Names Data Base; at present numerical substitutions are used until international standards are available and in general use. Some official names from Aboriginal languages include generic terms in these languages, rather than generics in English or in French. Questions of pronunciation guides for mapping and other uses require further discussion, although educational materials complete with sound, providing the pronounciation of such geographical names, have been prepared in the Yukon.

As yet, although some geographical names have been recorded in syllabics (e.g. Inuktitut syllabics), these forms have not been accorded any official status.

### 3.4 Development of appropriate methodology, tools and training

Among the most important tools developed during the past five years are two publications addressing issues of Aboriginal naming:

(a) a field manual: *Guide to the field collection of Native geographical names / Guide pour la collecte sur le terrain de toponymes autochtones* (1992)
(b) an annotated bibliography: *Native Canadian geographical names: an annotated bibliography / La toponymie autochtone du Canada : une bibliographie annotée* (1993 and 1995 and now in the production of the third edition)

In 1992/93, the CPCGN produced an 11-minute video (with the same images, but separate soundtracks in English and French) to explain to the general public, the technical and cultural aspects of gegraphical naming in Canada. In 1996/97 this video, *What's in a toponym? The story of Canada's geographical names / La toponymie : mémoire des lieux*, was re-issued and will be distributed to schools across Canada during the CPCGN Centennial celebrations.

In Quebec, the Commission de toponymie published *La toponymie autochtone Québec, bilan et prospective* (1996); this included an annex "Politique relative auxs noms autochtones". The translation of this document into English was arranged by the Secretariat of the CPCGN and is available as *Native toponymy in Québec ... past, present and future.*

### 3.5 Dissemination of accurate toponymic information

Canadian geographical names are disseminated in a variety of ways: for example, through publications (including maps); through exhibits; through the World Wide Web; and through digital toponymic files.

### 3.5.1 Publications

At the national level, the following have been completed:

- *Gazetteer of Canada Series*: revised hard copy volumes and microfiche for Nova Scotia (1993), Manitoba (1994), and New Brunswick (1995). The first edition of the *Concise Gazetteer of Canada* was published in 1997.

- *Canoma* - two issues per year with articles and notes, including material on policy development in Canadian toponymy; the newsletter was started in 1975 and now has an index updated annually.

- Information papers
  - 100 years of geographical naming in Canada (1997)
  - Features having names in both official languages and policies determining their use on maps and in texts (updated annually)

Since 1992, the offices of the provincial, territorial and federal members of the CPCGN have published various toponymic materials, including:

- Québec: *Noms et lieux du Québec - Dictionnaire illustré* (1994, 1996). Material also now available on CD-ROM.
- Alberta: *Place Names of Alberta,* in four volumes (1991, 1992, 1994, 1996)
- Québec: *Supplément cumulatif* to the 1987 Répertoire toponymique du Québec (1993 and 1997).
- Northwest Territories: *NWT Geographic Names - Program Manual* (1993)
- Yukon publications on historical/cultural aspects of Yukon geographical names
- Programme information brochures continue to be available from BC, Yukon, Manitoba, and Quebec; and newsletters from BC, Alberta, and Quebec
- Parks Canada re-issued its bilingual list of national parks and national historic sites, in *Terminology used by Parks Canada / Terminologie en usage à Parcs Canada* (1997)
- The pamphlet *Naming Canada's geographical features / La dénomination des entités géographiques du Canada* continues to be made available to members of the public making names submissions

### 3.5.2 Exhibits and the media

Dissemination of standardized geographical names to the public has been promoted through two exhibits developed in conjunction with 100 years of official naming in Canada in 1997:

- CPCGN: *Every name tells a story: 100 years of official place naming in Canada / À chaque nom son histoire : 100 ans d'apellations officielles de noms de lieux au Canada.* Much of the exhibit material is also now available on the World Wide Web.
- Alberta: *From Abasand to Zoldovara - place names, a part of our heritage*

Toponymic information has been disseminated through the media - particularly through radio and TV programmes; the press; presentations to school interest groups; open house days; office visits; conference papers, etc.

### 3.5.3 Internet and digital files

A major step forward in disseminating geographical names information worldwide has resulted from the technology of the WWW. A far larger audience across the world can

now access Canadian geographical names. The federal geographical names website provides entry into the CGNDB and provides general administrative information about standardization of geographical names. From this Natural Resources Canada's website, users can link to the geographical names data base of British Columbia and find information about programmes in the Northwest Territories, Alberta and Quebec.

A major initiative to make toponymic material available for eductional purposes has been started through SchoolNet. Articles, games, teachers' kits have been included so far; so too, have some modules created by students on toponymy of different regions of Canada.

Geographical names digital data files from the CGNDB (and from a few provincial and territorial data bases) can now be purchased by those wishing to use standard geographical names data in their own data bases or in value-added products. In addition, links are being made from other geo-referenced data bases to the geographical names on the WWW; this brings the advantage of accessing a site where the data are updated daily.

### 3.6 Outreach and liaison with the international community

Over the past five years Canadian geographical names publications, information and advice have been provided to names authorities and other offices around the world.

The goals of UN standardization have been promoted in varous ways:

- Canada has participated in the work of the United States/Canada and Romano-Hellenic divisions
- Canadians have participated regularly in meetings of UNGEGN
- Helen Kerfoot has worked as Vice-Chair of UNGEGN since 1991
- Assistance has been provided for training, including courses in South Africa, New Zealand and Latvia, and for working meetings in Australia and Korea.
- The CPCGN continues to have links with academia through the Canadian Society for the Study of Names, the American Names Society, and ICOS.
- The use of official names is promoted, within the government and with private sector publishers, e.g. Canadian Geographic, National Geographic, Reader's Digest
- A United Nations geographical names standardization module was introduced on the GeoNames WWW site

## 4. Use of official names

Names as officially approved by the CPCGN are used on federal maps, for example, on Natural Resources Canada products - National Topographic System (NTS) maps, 1:2M and smaller scale maps; and on Canadian Hydrographic Service and National Defence chart and map products. Efforts continue to be made to increase the awareness in federal departments of official names sources and services, and to supply accurate names information to map producers. The CPCGN continues to produce paper copy gazetteer volumes. Reprinting the *Concise Gazetteer of Canada* about every five years is foreseen. However, the viability of paper copy products of this sort will need constant review.

In the digital world, it will be crucial to meet the challenge of maintaining up-to-date records, so that authorized toponymic data bases become indispensible tools and focal points for other geo-referenced data sets. For example in Canada, linking to the National Topographic Data Base and to other environmental, regulatory and inventory data bases, will promote the use of official names, both within government and in the private sector.

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# REPORTS BY DIVISIONS AND GOVERNMENTS ON THE SITUATION IN THEIR REGIONS AND COUNTRIES AND ON THE PROGRESS MADE IN THE STANDARDIZATION OF GEOGRAPHICAL NAMES SINCE THE SIXTH CONFERENCE

## Report of the United States/Canada Division 1992-1997

Paper submitted by the United Nations Group of Experts on Geographical Names, United States/Canada Division**

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** Prepared by Helen Kerfoot, Executive Secretary, Canadian Permanent Committee on Geographical Names, and Roger L. Payne, Executive Secretary, United States Board on Geographical Names.

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Since the Sixth United Nations Conference on the Standardization of Geographical Names in 1992, representatives of the United States / Canada Division have met twice a year at geographical names meetings of either country: United States Board on Geographic Names and the Canadian Permanent Committee on Geographical Names. Also they have met more informally at the annual meetings of the professional societies: American Name Society and the Canadian Society for the Study of Names.

Several areas of Divisional cooperation since 1992 may be mentioned.

- In 1988, a Document of Understanding was signed concerning the treatment of names of geographical features shared by Canada and the United States (see E/CONF.85/L.54). As a result of the process established, any name changes or name proposals for transboundary features are considered by the names authorities of both countries. While local cultural and historical factors are respected, the general aim is for standardization of names of features across the international border. The principles and mechanisms set out in the Document continue to be followed by both countries.

- Resolution V/22 (Fifth Conference) refers to Aboriginal / Native geographical names. For both countries of the Division, work has continued to address collection and office treatment of such names. The United States has approved a policy for treatment (collecting, recording and application) of Native American names; this is available in published form. Canada has prepared a manual for the field collection of Aboriginal names, and two editions of an annotated bibliography concerning the toponymy of Canada's Aboriginal Peoples. Exchange of materials, ideas, and experiences has provided each names authority with useful comparisons to consider in developing its own approaches to recording, writing and formalizing such names.

- The development of geographical names digital data bases and, in the last couple of years, World Wide Web sites on the Internet, have been vital to both the United States and Canada in maintaining and distributing toponymic data. Both national names authorities now manage their digital systems with ORACLE RDBMS software and make their data available to the public, either through the WWW or through the purchase of digital files. The basics of data storage and dissemination continue to be exchanged between the names authorities. However, as the laws on intellectual property and copyright differ between the two countries, questions of sales and licensing are not addressed in common.

- Various approaches to the use of diacritics in names have been shared, as the USBGN reviewed its policy on this subject.

- At the state/provincial level, in addition to the national level, collaboration has been encouraged to resolve local issues, for example, questions relating to common features between Canadian provinces and US states.

- Canadian authorities continue to benefit from the expertise provided through the USBGN on practices for writing names of places and features in countries outside the United States / Canada Division.

- Staff of the USBGN have been very active in developing and offering toponymic training, through courses under the auspices of PAIGH, and through courses offered under the auspices of the United Nations. Canadians have also contributed to the work of UN toponymy courses, and in early 1997, staff of both countries worked together as part of a team providing toponymic training to the Baltic Division in Riga, Latvia.

In addition, the following contributions may be noted.

- The United States re-compiled the names and contact addresses of names authorities in the United States, Canada, and Mexico.

- The resolutions from the first six United Nations Conferences on the Standardization of Geographical Names have been compiled into a compendium of resolutions grouped by subject area. Both English- and French-language texts have been made available by Canada for the Seventh Conference, and it is planned to update the compendium as necessary following this Conference.

The United States and Canada continue to cooperate on toponymic issues on an ongoing basis. Exchange of documentation, concepts, and methodology encourages and enhances national toponymic standardization programmes.

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# TOPONYMIC DATA FILES: COMPATIBILITY AND STRUCTURE OF SYSTEMS

## Canadian Geographical Names Data Base

Paper submitted by Canada**

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** Prepared by Peter Revie, former Data Base Manager of the Canadian Geographical Names Data Base, Natural Resources Canada, and Helen Kerfoot, Executive Secretary, Canadian Permanent Committee on Geographical Names.

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## Introduction

The Canadian Geographical Names Data Base (CGNDB) is the data bank of Canada's geographical names, maintained by the Geographical Names Section, part of the Centre for Topographic Information, Geomatics Canada, Natural Resources Canada. Its purpose is to store names that have been approved by the Canadian Permanent Committee on Geographical Names (CPCGN) and to make these authoritative records available for government and public use.

The naming of geographical features in Canada is today the responsibility of each province and territory, except where federal lands, such as Indian reserves or national parks, are concerned. Details of the decisions to adopt, change, or reject geographical names are sent to the CPCGN Secretariat to maintain the national registry. All such names records are entered into the CGNDB, and the office copies of the National Topographic System (NTS) maps are amended to reflect these name decisions.

The forerunner of the CGNDB (the National Toponymic Data Base) was developed in 1978 as a replacement for a growing card-index registry, which had been maintained since the creation of the original Geographic Board of Canada in 1897. It was designed to increase the efficiency of gazetteer production and NTS names compilations. In 1987, the digital data base was remodelled into its current relational data base form. Today, the CGNDB is managed with ORACLE RDBMS software (Version 7.1.4), running on a SPARC 10, using the operating system SOLARIS 2.4. The use of character set ISO 8859 ensures the inclusion of accented characters used in Canada's French-language geographical names. Diacritics and syllabics found in some Canadian Aboriginal language names, and which are presently beyond the scope of most computer systems, are represented in the CGNDB by numerical substitutions. When international standards are accepted and implemented, the CGNDB records will be modified accordingly.

The CGNDB now contains over 500 000 geographical names records. Approximately 14% represent populated places/administrative areas etc., 63% water features, and 23% terrain features (e.g. mountains and peninsulas). Each record includes a unique identifier; codes to indicate status, feature type, and the region or territory in which the place/feature lies; as well as several location fields. In some cases, historical information about the origin of the toponym is also included.

Approximately 67% of CGNDB records represent current official geographical names approved by the CPCGN. The remainder are unofficial; these may include other locally-used names for features, or formerly approved names that have been changed or rescinded.

The CGNDB records are currently distributed by jurisdiction in the following percentages:

| Province / territory | % | Province / territory | % |
|---|---|---|---|
| Quebec | 39.1 | N.W.T. | 3.9 |
| Ontario | 16.0 | Saskatchewan | 3.0 |
| British Columbia | 10.7 | Alberta | 2.5 |
| Newfoundland | 7.2 | Yukon | 1.1 |
| Nova Scotia | 6.3 | Undersea features | 0.8 |
| Manitoba | 4.8 | P.E.I. | 0.6 |
| New Brunswick | 4.0 | | |

**Fields of data**

Names for a wide range of geographical features are stored on the CGNDB. Each record contains a numerical "generic code" which distinguishes the type of entity; over 1000 different generic codes are currently used. Using this code, records can be grouped into broader pre-determined categories, such as 'Unincorporated Rural Communities', 'Elevated Shoreline Features' or 'Ice and Snow Features'. Recently, these categories have been upgraded, and a standard set of 38 feature classes (22 of which refer to physical features) has been established for use in data distribution and in gazetteers.

The location of a feature is recorded on the CGNDB using several fields. A primary set of geographical coordinates indicates the centre of most types of features; although, for flowing-water features, coordinates of the mouth are recorded and headwater coordinates are also being included. The National Topographic System map on which each set of approved coordinates lies is maintained as a data field and records have now been upgraded to include the reference number of each additional NTS map (1:50 000 scale) on which the feature appears. Official records contain the names of at least one geographic or administrative unit in which the feature lies. Such units include Land Districts, Geographic Counties, Section-Township-Range, etc., depending on the province or territory. A location narrative field is used for many records to present a brief description of the whereabouts of the feature or place, usually in relation to a larger, more prominent feature or place.

The geographical coordinates stored on the CGNDB are determined by the names authority of each jurisdiction, normally from the NTS 1:50 000 scale maps. New fields have been included in the CGNDB to record the datum system of the map that was used for this purpose. Although some CGNDB coordinates do include seconds, these values for the majority of records have not yet been determined, and read as '00'. However, as more precision of coordinates is requested for GIS use, improvements are underway in several regions (for example, seconds are now available for all Manitoba records).

Following is a brief description of the fields of data which can be made generally available from the CGNDB:

| Field Name | Field Description |
|---|---|
| • Region Code | A 2-digit numerical field identifying the province or territory of Canada where the feature/place is found. |
| • Feature Name | The name of the feature or place. |
| • Name Key | An upper-case version of the Feature Name, used for searching and sorting. All special and accented characters have been omitted. |
| • Unique Key | A 5-character value assigned by the system to a newly-created record for unique identification of the record. The first character indicates the province or territory to which the feature/place belongs. |
| • Status Code | An alpha-numeric code that indicates the status of the name. |

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|---|---|
| • Border Flag | A flag that indicates whether a feature crosses a provincial/territorial or international boundary. |
| • Obscure Generic | A flag to identify records whose generics are not self-evident. |
| • Decision Date | The date, in the form 'DD-MON-YY', on which the province or territory officially recognized the name as shown in the record (for example, '06-MAY-89'). |
| • Decision Date Century | A field identifying the century of the Decision Date. (Not included in the Decision Date field.) |
| • First Date | The date, in the form 'DD-MON-YY', on which a decision was first made for the name shown in the record. |
| • First Date Century | A field identifying the century of the First Date. (Not included in the First Date field.) |
| • Change Date | The last date-of-change to fields of the CGNDB record in the form 'DD-MON-YYYY'. (System generated.) |
| • Generic Code | A numerical code which identifies the type of feature or place. |
| • Generic Term | The English-language identification of the Generic Code, indicating the type of feature or place. |
| • Cross Reference | The primary variant name for the feature/place. |
| • Cross Reference Unique Key | The 5-character value of the Cross Reference (see Unique Key). |
| • Gazetteer Map | The NTS 1:50 000 scale map (if not available, the 1:250 000 NTS or a Canadian Hydrographic Service chart) where the approved coordinates of the feature lie. |
| • Latitude / Longitude | The approved coordinates of the feature/place. |
| • Geo Location 1 | The first level geographical unit in which the feature/place is located. |
| • Admin Location 1 | The first level administrative unit in which the feature/place is located. |
| • Location Narrative | A brief description of the location of the feature/place. |
| • Park Code | A code identifying features/places that lie within, or cross the boundary of a national park or national park reserve, and which indicates the name of the park or reserve. |
| • Head Lat / Head Long | For flowing-water features, the headwater coordinates. |
| • Head Map | The NTS 1:50 000 map where the headwater coordinates lie. |

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**Satellite files and shadow data bases**

In addition to the types of records and fields described above, the CGNDB contains a number of satellite files of information related to geographical names and mapping.

- One such file is a registry of the names of Canada's World War II fatal casualties. This provides reference data consulted in the process of naming features in honour of Canadian war casualties. Ultimately, the records of those honoured should be linked to the geographical names records; so far, this has been completed for Saskatchewan and British Columbia, as well as for some records elsewhere in Canada.
- A set of records gathered solely for NTS names compilations is known as 'Special Records', and contains names not normally considered by the CPCGN, but required for topographical mapping: for example, the names of roads, dams, railways, bridges, and conservation areas, amongst others.
- Titles of NTS maps are verified or selected in a satellite file known as the 'Sheet Title' registry.
- Another essential part of the CGNDB records is the extents of the named features. At present, this large body of graphical data is still maintained on paper copies of NTS maps.

As well as the CGNDB *production* data base, it is necessary to keep some associated updated data bases, for particular purposes.

- A small independent copy of the CGNDB (with 20% of the records) serves as an area to *test* programs, on-line forms, and procedures prior to their implementation in the main data base.
- Another version of the data base which will serve as a *development* area where new data models for components of the CGNDB can be tested, and a repository is included for ORACLE's Designer 2000 case software.
- For the purposes of making CGNDB data available to World Wide Web users, a *copy* data base has been created. This is updated daily from the production version of the CGNDB.

**Updating records in a digital environment**

Many of the provincial and territorial organizations, from whom CGNDB data originates, are using digital systems to manage their toponymy. Relevant CGNDB records are made available as a starting point to any jurisdiction that wishes to initiate a digital data base of its own. From there, a CPCGN member will keep the CPCGN Secretariat informed of any name decisions in the jurisdiction, by forwarding updates for entry into the CGNDB. Although traditionally record updating has taken place from paper copy, the information transfer is now starting to be performed digitally, through the use of diskettes, magnetic tapes, and ftp data transfer, with upload scripts or programs. Since the operating platforms of each jurisdiction differ, incoming data from each requires a particular upload procedure on the CGNDB; several are currently in development phases.

**Geographical names for mapping**

The Geographical Names Section is required to provide up-to-date toponymy for each 1:50 000 or 1:250 000 NTS map produced or revised by the Centre for Topographic Information. Up to 500 names lists and map manuscripts are prepared each year from CGNDB records; each names list must still undergo a manual editing process before it accurately depicts the appropriate selection of names required for a particular map. Cartographers editing cartographic data from the National Topographic Data Base (NTDB) with digital systems capable of manipulating text, receive

CGNDB names lists on diskettes. Currently, the integration of geographical names records from the CGNDB with digital cartographic data is in its early phases. For several thousand 1:50 000 scale map sheet areas, names as shown on the most recent printed map sheet have been loaded into the NTDB. At present, research is under way to establish a process for updating this toponymy layer from the continually updated records of the CGNDB. In addition, exploration of the incorporation of a graphical element into the CGNDB to depict the extent of features, will undoubtedly be a part of the CGNDB's future development.

## Links to other data bases

The CGNDB's focal point is the geographical name itself and each name record has a unique identifier. Such geo-referenced records form a valuable search tool when linked to other federal and provincial data bases. A project is currently being completed to match CGNDB records to corresponding Statistics Canada place name records. This will provide a link between official CPCGN place names and population data, and also possibly postal codes. The Government of Canada is presently using the CGNDB records as the official authority file of geographical names, to be used as a reference for those filing environmental impact reports, now required by law. Plans have been developed for the regular import of records into the CGNDB from the Undersea Features Data Base, managed by the Canadian Hydrographic Service. As previously mentioned, work is in hand to associate the CGNDB toponymy with cartographic files of the National Topographic Data Base. Also within Natural Resources Canada, initiatives are in hand to improve links between various Departmental data bases, as well as to participate in the broader context of developing a Canadian Geospatial Data Infrastructure. Geographical names are basic components for such initiatives.

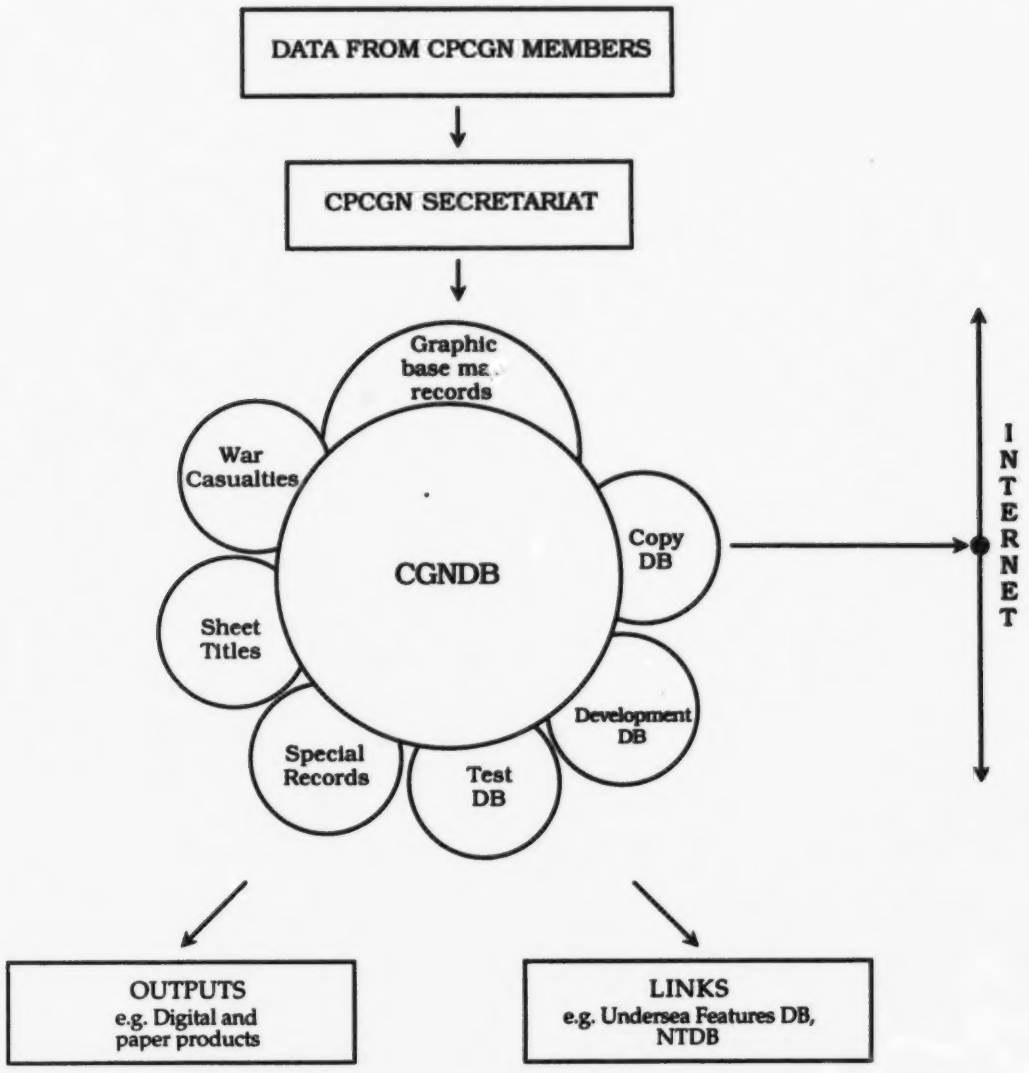
## General availability of CGNDB data

One long-term objective, that of providing public on-line access to CGNDB records, has recently been realized. As of August 1994, individuals having access to Internet may query official geographical names, consult information about the CPCGN and its publications, and find out how to order CGNDB data.
(URL ... English ... http://geonames.NRCan.gc.ca
... French ... http://toponymes.RNCan.gc.ca)

CGNDB data can be purchased: potential clients can choose from a list of available fields, regions and formats for a customized request, or select from more standardized products from the CGNDB. (Requests for data from a single province or territory are normally referred to that particular names authority for the opportunity to respond.)

For additional information about the CGNDB, how to acquire geographical names data, or about Canada's geographical names in general, please contact:

Geographical Names
Natural Resources Canada
Room 634, 615 Booth Street
Ottawa ON K1A 0E9
Telephone: (613) 992-3892
Fax: (613) 943-8282
e-mail: geonames@NRCan.gc.ca




**CGNDB COMPONENTS AND SERVICES**

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ON THE STANDARDIZATION OF
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New York, 13-22 January 1998
Item 6 (b) of the provisional agenda*

# TOPONYMIC DATA FILES: DATA ELEMENTS REQUIRED

## Feature classes established for geographical names records on the Canadian Geographical Names Database

Paper submitted by Canada**

* E/CONF.91/1.

** Prepared by Helen Kerfoot, Executive Secretary, Canadian Permanent Committee on Geographical Names.

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Considerable work has been undertaken in Canada on generic and feature-type / entity terminology relevant to Canada's geographical names.

• For example, the glossary of *Generic Terms in Canada's Geographical Names / Géneriques en usage dans les noms géographiques du Canada* was published jointly by the Department of Secretary of State and Energy, Mines and Resources Canada in 1987. Annually, an advisory committee of the Canadian Permanent Committee on Geographical Names reviews any additional generics in use in official names.

• Also, for the development of the Canadian Geographical Names Data Base, numeric codes and tables were established to identify the types of features being recorded. For this purpose over 800 distinct codes were established (e.g. for swamp, pré, cirque, millpond, paroisse, Northern Settlement). These numeric codes could be grouped to select information on groups of features (e.g. ice and snow features, populated places).

• With the development of the *Concise Gazetteer of Canada*, the release of names records on the World Wide Web, and the sale of digital toponymic data, the grouping of features into feature classes or categories was revisited. Users of the data were particularly anxious that populated places and adminstrative areas not be grouped together into umbrella categories. As a result, the following list of 38 terms and codes are now used nationally for the general breakdown of Canadian names records.

For more details of some types of features falling into each feature class, please refer to the report "Concise Gazetteer of Canada 1997", under agenda item 6(f).

**Populated places / administrative areas**

| *English* | | *Français* | |
|---|---|---|---|
| Code | Term | Code | Terme |
| PROV | Province | PROV | Province |
| TERR | Territory | TERR | Territoire |
| CITY | City | VIL1 | Ville |
| TOWN | Town | VIL2 | Ville |
| VILG | Village | VILG | Village |
| HAM | Hamlet | HAM | Hameau |
| MUN1 | Other municipal / district area - major agglomeration | AZM1 | Autre zone municipale / de district - agglomération majeure |
| MUN2 | Other municipal / district area - miscellaneous | AZM2 | Autre zone municipale / de district - divers |
| UNP | Unincorporated place | LNO | Lieu non organisé |
| IR | Indian Reserve | RI | Réserve indienne |
| GEOG | Geographical area | GÉOG | Zone géographique |
| PARK | Conservation area | PARC | Zone de préservation |
| MIL | Military area | MIL | Réserve militaire |

**Hydrographic and terrain features (alphabetized by English-language code)**

| *English* | | *Français* | |
|---|---|---|---|
| Code | Term | Code | Terme |
| BAY | Bay | BAIE | Baie |
| BCH | Beach | PLAG | Plage |
| CAPE | Cape | CAP | Cap |
| CAVE | Cave | CAV | Caverne |
| CHAN | Channel | CHEN | Chenal |
| CLF | Cliff | ESC | Escarpement |
| CRAT | Crater | CRAT | Cratère |
| FALL | Falls | CHUT | Chutes |
| GLAC | Glacier | GLAC | Glacier |
| ISL | Island | ÎLE | Île |
| LAKE | Lake | LAC | Lac |
| MTN | Mountain | MNT | Mont |
| PLN | Plain | PLNE | Plaine |
| RAP | Rapids | RAP | Rapides |
| RIV | River | CDE | Cours d'eau |
| RIVF | River feature | EFLV | Entité fluviale |
| SEA | Sea | MER | Mer |
| SEAF | Sea feature | EMAR | Entité maritime |
| SEAU | Undersea feature | SMER | Entité sous-marine |
| SHL | Shoal | H-FD | Haut-fond |
| SPRG | Spring | SRCE | Source |
| VALL | Valley | VALL | Vallée |

**Other (alphabetized by the English-language code)**

| *English* | | *Français* | |
|---|---|---|---|
| Code | Term | Code | Terme |
| FOR | Forest | FOR | Forêt |
| VEGL | Low vegetation | VÉGB | Végetation basse |
| MISC | Miscellaneous | DIV | Divers |

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